

AMENDMENTS TO THE DRAWINGS

Please amend the Figure 1 as shown in the enclosed replacement sheet. Specifically, Figure 1 has been amended to include labels for all elements shown in Figure 1. Applicant submits that the replacement figure is formal. No new subject matter is added by the aforementioned amendment to the drawings.

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-19 were initially pending in this application. Claims 1-19 have been canceled by this reply. Claims 20-43 have been newly added by this reply. Claims 20, 32, and 43 are independent. The remaining claims depend, directly or indirectly, from claims 20 and 32.

Drawings

Figure 1 was objected to by the Examiner for lacking element labels. In accordance with the Examiner's suggestions, Figure 1 has been amended by this reply to include element labels for all the elements in Figure 1. No new matter has been added by way of these amendments. Accordingly, withdrawal of this objection and acceptance of the drawings in this application is respectfully requested.

Objections

Claims 2, 4, and 16 are objected to for minor informalities. Claims 2, 4, and 16 have been canceled by this reply. Thus, this rejection is now moot with respect to claims 2, 4, and 16.

Newly Added Claims

Newly added independent claims 20, 32, and 43 recite a method and apparatus for processing and displaying video data. Specifically, the new claims clarify that the invention relates to a method and apparatus uses a buffering arrangement within a receiver/decoder to

process and display video data (e.g., subtitle data, graphics data, etc.). More specifically, as recited in the new claims, the buffering arrangement includes a graphics buffer region that is divided into several buffer sub-areas, namely, a first buffer sub-area initially designated as a display buffer, a second buffer sub-area initially designated as a working buffer, and several icon buffer sub-areas. The display buffer and the working buffers are configured to store both subtitle data and graphics data, while the icon buffers are configured to store graphic data. While the first buffer sub-area and the second buffer sub-area are initially designated as “display buffer” and “working buffer,” respectively, the designations of “display buffer” and “working buffer” can be interchanged among the first buffers sub-area and the second buffer sub-area. That is, the designation of the first buffer sub-area can be changed to “working buffer” and the designation of the second buffer sub-area can be changed to “display buffer.” Further, as recited in the claim, the graphics data is copied into the working buffer prior to interchanging the designation of buffer sub-area from “working buffer” to “display buffer.” In one embodiment of the invention, data stored in the buffer sub-area designated as the working buffer is ready to be displayed after the graphics data is copied from at least one of the icon buffer sub-areas to the working buffer.

The aforementioned interchangeability of the display buffer and working buffer sub-areas prevents video data being output from one buffer sub-area to be overwritten by new video data received by another buffer sub-area. Support for the newly added claims may be found, for example, on pages 3 and 18, and Figure 5 of the Instant Specification. No new matter has been added by any of the aforementioned claim amendments.

Rejections under 35 U.S.C. § 112

Claims 1-19 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Claims 1-19 have been canceled by this reply. Thus, this rejection is now moot.

In addition, the Examiner has rejected claims 3 and 14 for insufficient antecedent basis. Claims 3 and 14 have been canceled by this reply. Thus, this rejection is now moot. In view of the above, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-7 and 11-19 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over EP0752695 (“O’Sullivan”). Claims 1-7 and 11-19 have been canceled by this reply. Thus, this rejection is now moot. To the extent that this rejection may apply to the newly added claims, the rejection is respectfully traversed.

O’Sullivan discloses a method for simultaneously displaying graphics and video data on a display. Specifically, O’Sullivan discloses a graphics adapter chip that stores graphics data in a graphics memory, while a video source stores video data in a video memory. Further, in O’Sullivan, source selection logic is used to select when each of the graphics memory and the video memory output blocks of data to a digital-to-analog converter (DAC) for display on the screen (*see O’Sullivan, Figure 1 and page 7, lines 47-48*).

Turning to the rejection of the claims, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. The Application respectfully asserts that O’Sullivan fails to anticipate the claimed invention for at least the following reasons:

- (i) O'Sullivan fails to disclose or suggest a graphics buffer region comprising *three distinct buffer sub-areas* for the purpose of storing and processing video data. In particular, O'Sullivan fails to disclose or suggest a display buffer and a working buffer both of which are configured to store subtitle data and graphics data, and several icon buffer sub-areas for storing graphics data. Rather, O'Sullivan only discloses a video memory and a graphic memory (see O'Sullivan, Figure 2). Moreover, the graphic memory of O'Sullivan is not sub-divided into icon buffer sub-areas, a display buffer sub-area and a working buffer sub-area for storing different types of video data as recited in the claims;
- (ii) O'Sullivan fails to disclose or suggest copying graphics data from icon buffer sub-areas into a working buffer sub-area. Rather, O'Sullivan simply discloses storing graphics data from the graphics adapter chip into graphics memory until the graphics data is output and displayed on the screen (see O'Sullivan, page 5, lines 28-29). Thus, graphics data is not copied from one buffer sub-area to another buffer sub-area *prior to displaying* as required by independent claims 20 and 32; and
- (iii) O'Sullivan fails to disclose or suggest interchanging the designation of the display buffer sub-area and the working buffer sub-area. In fact, O'Sullivan does not even contemplate such interchanging of buffers for the purpose of displaying video data. Rather, O'Sullivan only discloses buffers each having a *single* specified designation (*i.e.*, the graphics memory stores graphics data and video memory stores other video data) and the DAC stores data from both the graphics memory and the video memory) (see O'Sullivan, page 7, lines 47-48). Moreover, because O'Sullivan is silent with respect to a buffer including multiple buffer sub-areas as recited in the

claim, interchanging designations of buffer sub-areas in O'Sullivan would not even be possible.

In view of the above, it is clear that O'Sullivan fails to disclose each and every element of newly added independent claims 20 and 32. Thus, independent claims 20 and 32 are patentable over O'Sullivan. Dependent claims 21-31 and 33-42 are patentable for at least the same reasons. Further, independent claim 43 includes similar allowable subject matter and is therefore patentable over O'Sullivan for at least the same reasons as claim 32. Accordingly, allowance of the claims is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 8-10 stand rejected under 35 U.S.C. 103(a) as unpatentable over O'Sullivan in view of U.S. Patent No. 5,835,156 ("Blonstein"). Claims 8-10 have been canceled by this reply. Thus, this rejection is now moot. To the extent that this rejection may apply to newly added claims 20-43, the rejection is respectfully traversed.

As described above, O'Sullivan fails to disclose or suggest the limitations of independent claims 20 and 32. Further, Blonstein fails to disclose or suggest all of the limitations of these claims or supply that which O'Sullivan lacks. Blonstein is only relied upon as teaching a cursor for the user to select or interact with element displays on the screen. (See Office mailed May 20, 2005, p. 10).

In view of the above, O'Sullivan and Blonstein, whether considered separately or in combination, fail to render newly added independent claims 20 and 32 obvious. Dependent claims 21-31 and 33-42 are patentable over O'Sullivan and Blonstein for at least the same reasons. Further, independent claim 43 includes similar allowable subject matter and is

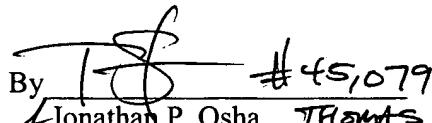
therefore patentable over O'Sullivan and Blonstein for at least the same reasons as claim 32. Accordingly, allowance of the claims is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 11345.027001).

Dated: September 19, 2005

Respectfully submitted,

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